

ABSTRACT

There has been effort to develop a lactobacillus that would be useful as a probiotic, and to develop a lactobacillus which would colonize and proliferate in lesions of infection, eliminating the causal bacteria.

This problem was resolved by developing a *Lactobacillus casei* species having the following key properties. (1) The species can be grown in the presence of any of one to four amino acids as a nitrogen source necessary for growth. (2) When a growth-promoting culture medium is inoculated with the species and *Escherichia coli* in the same count and subjected to anaerobic mixed culturing at 37°C, the final count of lactobacilli is 50% or more of the coliform count. (3) Upon cultivation in an appropriate culture medium, the final pH value is 4.0 or below, and the highest acidity is 1.5% or more. (4) The species is resistant to 5% bile salts. (5) The species produces an antibiotic.